

base₃

multiplication table

| | 1 | 2 | 3 | 10 |
|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 10 |
| 2 | 2 | 10 | 12 | 20 |
| 3 | 3 | 12 | 21 | 30 |
| 10 | 10 | 20 | 30 | 100 |

| | / | L | Z | ┘ |
|---|---|----|----|-----|
| / | / | L | Z | ┘ |
| L | L | ┘ | // | ┘┘ |
| Z | Z | // | // | ┘┘ |
| ┘ | ┘ | ┘┘ | ┘┘ | ┘┘┘ |

children can learn the multiplication table in hours
instead of weeks

0 is represented by the sound N*

1 is represented by the sound T (and P, K, D, B, G)

2 is represented by the sound L (and R)

3 is represented by the sound Z (and F, V, Θ, Ø, Ʒ, J, S)

this can lead to some entertaining wordplay

- in the old system, numbers were grouped in 3s (1,111,111)
- in base₃, numbers are grouped in 4s (/ /// ////)
- call each group of four a “quartet”

certain sounds have numerical references in base₃

large number naming conventions

E, I, O, Ǝ, 0 = 1

U = 2

Y = 3

V = 4

UY = 5

UV = 6

YV = 7

large number naming conventions

| | | |
|---|-----------------------|--------------------|
| any number consisting of 2 quartets is preceded by U | / ---- | 256 |
| any number consisting of 3 quartets is preceded by Y | / ---- ---- | 65,536 |
| any number consisting of 4 quartets is preceded by V | / ---- ---- ---- | about 16 million |
| any number consisting of 5 quartets is preceded by UY | / ---- ---- ---- ---- | about 4 billion |
| any number consisting of 6 quartets is preceded by UV | / ---- ---- ---- ---- | about 1 trillion |
| any number consisting of 7 quartets is preceded by YV | / ---- ---- ---- ---- | about 280 trillion |

• base₃ is efficient to speak

228,844 = two hundred and twenty-eight thousand, eight hundred and forty four
16 syllables

same quantity in base₃

Z //┘ ┘┘ = 3 1331 2020 = YNYZ BŲZUT RĚNLŲN

6 syllables

the numbers

| | | | |
|----|------|--------|--------|
| 0 | 0 | ~ | NV* |
| 1 | 1 | / | NYT |
| 2 | 2 | L | NYL |
| 3 | 3 | Z | NYZ |
| 4 | 10 | ┘ | NUTEN |
| 5 | 11 | // | NUTU |
| 6 | 12 | // | NUTEL |
| 7 | 13 | // | NUTEZ |
| 8 | 20 | ┘┘ | NULEN |
| 9 | 21 | // | NULET |
| 10 | 22 | // | NULU |
| 11 | 23 | // | NULEZ |
| 12 | 30 | ┘┘ | NUZEN |
| 13 | 31 | ┘┘ | NUZET |
| 14 | 32 | ┘┘ | NUZEL |
| 15 | 33 | ┘┘ | NUZU |
| 16 | 100 | ┘┘┘ | NETNU |
| 17 | 101 | ┘┘┘ | NETNET |
| 18 | 102 | ┘┘┘ | NETNEL |
| 19 | 103 | ┘┘┘ | NETNEZ |
| 20 | 110 | ┘┘┘ | NETUN |
| 21 | 111 | ┘┘┘ | NETY |
| 22 | 112 | ┘┘┘ | NETUL |
| 23 | 113 | ┘┘┘ | NETUZ |
| 24 | 120 | ┘┘┘ | NETLEN |
| 25 | 121 | ┘┘┘ | NETLET |
| 26 | 122 | ┘┘┘ | NETLU |
| 27 | 123 | ┘┘┘ | NETLEZ |
| 28 | 130 | ┘┘┘ | NETZEN |
| 29 | 131 | ┘┘┘ | NETZET |
| 30 | 132 | ┘┘┘ | NETZEL |
| 31 | 133 | ┘┘┘ | NETZU |
| 32 | 200 | ┘┘┘┘ | NELNU |
| 33 | 201 | ┘┘┘┘ | NELNET |
| 34 | 202 | ┘┘┘┘ | NELNEL |
| 35 | 203 | ┘┘┘┘ | NELNEZ |
| 36 | 210 | ┘┘┘┘ | NELTEN |
| 37 | 211 | ┘┘┘┘ | NELTU |
| 38 | 212 | ┘┘┘┘ | NELTEL |
| 39 | 213 | ┘┘┘┘ | NELTEZ |
| 40 | 220 | ┘┘┘┘ | NELUN |
| 41 | 221 | ┘┘┘┘ | NELUT |
| 42 | 222 | ┘┘┘┘ | NELY |
| 43 | 223 | ┘┘┘┘ | NELUZ |
| 44 | 230 | ┘┘┘┘ | NELZEN |
| 45 | 231 | ┘┘┘┘ | NELZET |
| 46 | 232 | ┘┘┘┘ | NELZEL |
| 47 | 233 | ┘┘┘┘ | NELZU |
| 48 | 300 | ┘┘┘┘┘ | NEZNU |
| 49 | 301 | ┘┘┘┘┘ | NEZNET |
| 50 | 302 | ┘┘┘┘┘ | NEZNEL |
| 51 | 303 | ┘┘┘┘┘ | NEZNEZ |
| 52 | 310 | ┘┘┘┘┘ | NEZTEN |
| 53 | 311 | ┘┘┘┘┘ | NEZTU |
| 54 | 312 | ┘┘┘┘┘ | NEZTEL |
| 55 | 313 | ┘┘┘┘┘ | NEZTEZ |
| 56 | 320 | ┘┘┘┘┘ | NEZLEN |
| 57 | 321 | ┘┘┘┘┘ | NEZLET |
| 58 | 322 | ┘┘┘┘┘ | NEZLU |
| 59 | 323 | ┘┘┘┘┘ | NEZLEZ |
| 60 | 330 | ┘┘┘┘┘ | NEZUN |
| 61 | 331 | ┘┘┘┘┘ | NEZUT |
| 62 | 332 | ┘┘┘┘┘ | NEZUL |
| 63 | 333 | ┘┘┘┘┘ | NEZY |
| 64 | 1000 | ┘┘┘┘┘┘ | TENY |

* see <http://gendo.net/fonegrafiKs.pdf> for pronunciation guide